

*This large-scale student-centered, evaluation of the California Drug, Alcohol, and Tobacco Education (DATE) program shows how a state policy directed toward students at risk for substance abuse shapes perceptions, influences program directions, and affects both "at-risk" and "thriving" students. Qualitative data analysis revealed that a risk-oriented policy from the state influenced educators to use the risk factor model to shape services and identify at-risk students. Despite high implementation levels of services like Drug Abuse Resistance Education (DARE), few (if any) positive effects on either at-risk students or thriving students were found. Although the program was directed to assist at-risk students, identification often preceded detention, suspension, or expulsion. For two reasons, researchers question the validity of the risk factor model as an effective school-based substance abuse prevention tool: (a) the risk factor model is inherently difficult to implement, and (b) it is misused as an individual diagnostic tool. Implications are discussed.*

## ON BECOMING "AT RISK" THROUGH DRUG EDUCATION

### How Symbolic Policies and Their Practices Affect Students

JOEL H. BROWN

*Pacific Institute for Research and Evaluation*

MARIANNE D'EMIDIO CASTON

*University of California, Santa Barbara*

In the past quarter century, as attempts to formulate and administer programs aimed at curbing drug use among the student population have been made, the term *at risk* has become a phrase used to identify those who are deemed most likely to develop problems with illicit substances (Hawkins et al. 1987; Hawkins, Catalano, and Miller 1992). Two distinct but related

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applications of this term exist in research literature. One application refers to specific policies, and the other is the practice of "prevention science."

When examining the first meaning of the term at risk, the policy application, several characteristics emerge. For example, the National Commission on Excellence in Education (1983) and the Education Commission of the States (1988) used the term at risk when describing a culturally and economically disadvantaged society. This description included students with a high probability of scholastic failure. In another study, Placier (1993) demonstrated how flexible policy interpretations of the term evolved through the Arizona state legislature. When discussing the legislative decision by which some Arizona schools would receive increased funding, Placier found that the flexibility of the term at risk allowed for apparent collaboration between policymakers who were actually in disagreement. School programs based on these policies often differ widely. For example, Baizerman and Compton (1992) describe how at-risk students can either be labeled and discriminated against, or identified and served. By examining policy language, we show how state personnel transferred a risk-based substance use/abuse policy to school districts.

This type of policy analysis derives from the research of Edelman (1964), who sought to understand social programs by examining the symbolic uses of politics found in policy language. Of such language, he states:

*To let the adversary groups oppose each other through the workings of an administrative agency continuously resolving the conflicts in "decisions" and policies, replaces tension and uncertainty with a measure of clarity, meaning, confidence, and security. (p. 61)*

In policy formulation, among people with competing interests, at risk language is often used as an open-ended, often divergent construct. This application of the term at risk is known as the symbolic or formative use of policy language.

Defining the prevention science factors contributing to students' being designated as at risk is the second application of this construct. Based on the possession or the existence of "risk" characteristics, children may have increased risk of accidents, delinquency, and substance abuse (Hawkins, Catalano, and Miller 1992; Hawkins et al. 1987; Gillmore et al. 1991; Bell and Bell 1993; Coie et al. 1993; Rossi 1994). It has been argued that if students possessing these characteristics can be identified early, then future problems, like substance abuse, can be averted. Hawkins, Catalano and Miller (1992) summarize 13 groups of risk factors that lead to "greater risk of substance abuse" (p. 81). Risk factors include contextual, interpersonal, and individual dimensions. Contextual factors include (but are not limited to)

local laws and norms favorable toward substance-using behavior, such as the availability of alcohol at gas stations or quick-stop markets. Interpersonal and individual substance abuse risk factors include (but are not limited to) a low commitment to school as well as academic failure. According to the risk factor model, if students have a low degree of commitment to school and/or are academically failing, they are more likely to become substance abusers than other students not possessing these characteristics (Hawkins, Catalano and Miller 1992). Furthermore, it is believed that risk factors are cumulative; a student with more risk factors is more likely to become a substance abuser (Newcomb and Bentler 1988).

Despite a vast body of research, there are three concerns about the risk factor model. First, prevention research has been criticized because no research has been found "describing the frequency, intensity, duration, or mix of risk factors necessary to accurately predict adolescent alcohol and other drug (AOD) use" (Brown and Horowitz 1993, 536). Second, most substance abuse prevention science relates potential risk factors to *any* reported adolescent substance use (Klitzner 1987; McIntyre, White, and Yoast 1989; Hawkins, Catalano, and Miller 1992; Hawkins et al. 1987). Potential risk characteristics are more appropriately related to differing levels of reported adolescent substance use (Shedler and Block 1990). Third, it is postulated that because of these two concerns, the relationship between risk factors and substance abuse (as opposed to use) may be spurious. Regarding the third concern of the risk factor model, when applied to education, Richardson (1990) stated that

many programs designed for "at-risk" students are based on a theoretical framework that functions to maintain the status quo by labeling certain students as deficient on the basis of characteristics over which students have no control. (p. 73)

When it comes to the literature on substance use and abuse, researchers examine either the "at risk" policy or the "at risk" prevention science. We could not find evidence showing how "at risk" policies translate into the perceptions and prevention practices of people in naturalistic settings.

Why is it important to understand the relationship of "at risk" policy and prevention practice? Last year, for example, the federal government spent approximately \$1.8 billion in drug "abuse" prevention (U.S. Office of Management and Budget 1993). A key federal policy direction is toward at-risk students: "OSAP [Office of Substance Abuse Prevention] intends to fund applications that target youths with multiple risk factors, and propose comprehensive, multilevel prevention/intervention strategies that address clearly specified risk factors" (OSAP 1989, 4). Because the risk factor model

represents a major component of federal, (and as it will be seen) state, and local drug strategies, understanding how it is interpreted and applied is of great importance to understanding school-based drug education in the United States. Equally important is understanding how risk-based programs affect students. In this 2-year qualitative evaluation study of California schools, researchers show how "at risk" policy shapes perceptions, influences program directions, and affects students. This may be one of the first evaluation studies describing the intersection of substance use and abuse policy (based on risk), its application, and the effects of both on students. We ask three questions:

- How does a state-level policy directed toward identifying and assisting at-risk youth transfer to school districts?
- Once at-risk students are identified, what specialized services do they receive?
- How do such services affect students, especially at-risk students?

#### PROGRAM CONTEXT

The policy and prevention components under study are found in the California State Drug, Alcohol, and Tobacco Education (DATE) programs. DATE represents the umbrella term for one of the largest school-based alcohol and drug education programs in the United States. The DATE program includes funding from three primary sources: Federal Drug-Free Schools and Communities (DFSC), begun in 1986 under the Drug-Free Schools and Communities Act (Public Law 99-570); the Tobacco Use Prevention Education (TUPE), begun in 1989 under California Proposition 99 and California Assembly Bill 754; and the Comprehensive Alcohol and Drug Prevention Education (CADPE) program, begun in 1989 under California Assembly Bill 1087 and Chapter 983 of California Senate Bill 2599. Each program offered funding to schools for the prevention/intervention of alcohol, tobacco, and illicit substance use and abuse. DFSC and TUPE remain ongoing; CADPE was discontinued in 1992. Until 1991, each district applied separately to these sources to obtain prevention/intervention money. Using these funding sources, a consolidated noncompetitive DATE application process was initiated in 1991 by the California State Department of Education.

Since 1991, overall direct expenditures in DFSC and TUPE programs have totaled a minimum of \$157 million. Other considerable expenditures on behalf of the CADPE program, California off-budget expenditures, and local community expenditures have yielded an actual cost estimate of \$83.87 per year per California student (Romero et al. 1994), bringing the total estimate

to \$1.6 billion since 1991. Although the estimated cost range is wide, costs are likely to be toward the upper range of this value. The goal of presenting this information is illustrative and not intended to determine a cause-and-effect relationship between cost of program and effects on students. The purpose of presenting this information is to describe the financial context as part of the culture of DATE program development and implementation.

#### PROGRAM INTERVENTION

To receive DATE money, the Department of Education required implementation of many activities. Among them are the creation of district policies regarding drugs, retention and/or addition of specialized staff to deal with student drug issues, and the delivery of prevention education programs (California Department of Education 1991-1992). For example, the DATE program often funds the well-known Drug Abuse Resistance Education (DARE) program in which police officers provide students with law-enforcement-developed drug prevention education. The DATE program also funds services such as Red Ribbon Week. During Red Ribbon Week, an emphasis is placed on drug educational activities or contests, symbolized by students wearing red ribbons. Curriculum such as "Here's Looking at You, 2000" provides the teacher with drug information and a series of lessons to use with the class. These are just a few of the kinds of services the DATE program supports.

Another key aspect of the DATE program can be found in the funding application guidelines. Similar to federal guidelines, emphasis was placed on addressing the needs of at-risk students. Under the title "Philosophy and Purpose of DATE," it states:

The application also emphasizes the importance of reducing risk factors for drug, alcohol, and tobacco use and other problem behaviors of youth. Extensive research on risk factors offers a clear direction for prevention programs. . . . In planning prevention programs, begin by reviewing the following list of risk factors and protective factors. Determine which risk factors are most significant in your school community. Then inventory the resources that might be available to you in reducing these risk factors and increasing protective factors. With this information you can formulate objectives and activities that are designed to deal with the most important problems facing your students. (California Department of Education 1991-1992, viii)

Department of Education officials proceeded to identify 36 risk and four protective factors believed to be related to substance abuse.<sup>1</sup> To receive DATE money, school districts must show how they would provide substance use and abuse prevention based on a risk factor model.

#### EVALUATION HYPOTHESES

The literature on policy and prevention science and the stated concerns about risk factor research lead to the following hypotheses. The "at risk" policy language may be primarily symbolic, in that it represents a public display of a solution to the problem of adolescent substance "abuse". Although state and school district officials may differ in their perception of the problem of substance use, enough agreement is lent by the "at risk" language to allow prevention dollars to flow. After that point, districts design their own DATE services, formulating "objectives and activities that are designed to deal with the most important problems facing [their] students."

We maintain that the policymakers' linkage of "extensive research on risk factors" with the overall "at risk" policy provides scientific credibility to the state's approach to the problem. The use of science in this case provides reassurance to school district personnel and the public alike that the early identification of students as being at risk for substance abuse is the best way to prevent such problems. Although tying this policy language to funding began an alignment of school districts with the state's "at risk" point of view, we hypothesize that there is no necessary relationship between identifying at-risk youth and helpful prevention practices.

A 1992 evaluation of the DATE program found that highly visible mass-application services like DARE and Red Ribbon Weeks were delivered to students (Romero et al. 1993). These findings, combined with the risk orientation and previous research (Brown and Horowitz 1993; Horowitz and Brown 1993), lead us to elaborate our initial hypothesis. If the highest priority of the DATE program is symbolic (i.e., public reassurance), then highly visible services represent necessary public displays of solutions to the problem of substance "abuse". If, on the other hand, the primary interest of state and local school district officials is to help students with the potential for substance abuse problems, then once identified as at risk, these students should receive services directed toward their individualized needs. However, such services are often confidential, expensive, and, more important, not publicly visible. They do not satisfy public policy's requirement of symbolic display. We hypothesize that the primary interest of policymakers and school district personnel is to maintain a publicly visible display of reassurance that the substance abuse problem is being addressed. Consequently, we predict that students, regardless of perceived risk status, will report receiving the same types of services. Additionally, the priority of symbolic practices will result in the prevalence of publicly visible exclusionary actions such as detention, suspension, and expulsion when a student is caught using substances.

## METHODS

### OVERVIEW

In 1990, California Senate Bill 899 (Chapter 467) called for an overall evaluation of the DATE program. From 1991-1994, an evaluation was conducted along three quantitative dimensions: cost, program implementation, and self-reported student substance-use knowledge, attitudes, beliefs, and behaviors (Romero et al. 1993, 1994). Evaluators made site visits and collected data from 120 randomly selected districts, 10% of all California school districts. Data were collected describing every selected district's expenditures for each DATE service. Additionally, researchers conducted 12,000 Grades 4-12 student surveys. Evaluation participation was mandated by the California State Department of Education. The goal was to ascertain whether the DATE program had resulted in a reduction of student substance use (alcohol, tobacco, and illicit substances). Although these data yielded important information (Romero et al. 1993), they did not explain how expenditure decisions were made or how the social processes of program development and implementation occurred. Although many students were surveyed, the original design did not offer a student perspective of survey results. To achieve this, a large-scale qualitative evaluation component was undertaken in 1992 and 1993.

The results presented here arise from 2 years of qualitative data collection and analysis. In 1992, the research goal was to establish school district personnel's perceptions considering DATE program development and implementation. This was achieved through interviewing those involved in developing and implementing DATE services at the district level. During a 2-day site visit to 50 school districts (and at least two schools in each district), 388 individuals were anonymously interviewed. Interviewees ranged across district organizations from community members to teachers to superintendents. Taking the grounded theoretical and symbolic interactionist approaches, 149 of the initial 388 interviews were analyzed. Interviews were selected for analysis based on a combined random and purposeful sample of the data.

In 1993, the research goal was to examine student perceptions of program implementation and effectiveness and whether these services had similar and/or different effects on perceived at-risk versus thriving students. This was achieved through purposely reselecting 11 school districts (and two schools randomly drawn within each district) from the previous year's 50 districts to be revisited for another 2-day period. Schools represented elementary, middle, and high school grade levels, approximating the average daily attendance

and ethnicity balance in California. At each district, researchers anonymously interviewed two focus groups of approximately six students (representing males and females, multiple ethnicities, and each school grade), one designated by principals as being at-risk for substance abuse and another designated as thriving in their school. This process yielded 40 focus-group interviews that were analyzed using the same methods as in 1992, with the addition of content analysis. Given that qualitative research methods evolve from one study year to the next, we provide detailed methodological information from each study year.

### 1992 SAMPLING

The study results presented here arise from a qualitative, naturalistic (field) evaluation inquiry (Filstead 1970; Parlett and Hamilton 1972; Stake 1975; Guba 1978; Quinn-Patton 1987; Guba and Lincoln 1981). Of 120 districts in which quantitative data were collected, 42 were randomly selected and visited by a qualitative team. The eight largest state districts were also selected and visited. Reflecting the state population, 31 districts were from Southern and Central California, 13 from the Bay Area, and 6 from extreme Northern California.

During this first year, 388 respondents were interviewed; 184 came from the district level, and 204 came from the school level. At each district and at each of two randomly selected schools within the selected districts, between seven and nine key informants involved with developing and implementing the DATE program were purposely selected for interview (Zelditch 1962; Schutz, Walsh, and Lehnert 1967; Glick 1970; Spradley 1979; Gordon 1981). Key informants are defined as "individuals who possess special knowledge, status, or communication skills . . . who have access or observations denied the researcher" (Gilchrist 1992, 75). Key informant interviews included most DATE program developers and implementors within each district. Interviewees ranged across organizational levels from teachers to the superintendent. They included (a) the district DATE coordinator, (b) one DATE coordinator supervisor, (c) one DATE coordinator staff member, (d) the district financial coordinator, (e) the superintendent or assistant superintendent, (f) the site coordinator and a teacher at each of the two schools visited, and (g) a community member involved with the DATE project. Additionally, in this first round of qualitative data collection were four sets of exploratory interviews. One was with a pupil personnel services director, and three took place with students. Two of three student interviews were with groups of high

school students (five to eight students), and one interview was with a high school student participating as a DATE representative on a school board.

Researchers selected a subsample from the larger data set for analysis. This subsample consisted of 149 interviews from the original interviews and included the following:

- 72 school district personnel
- 71 school-site personnel
- participants of two high school student focus groups
- one individual high school student
- three California State Department of Education officials

This data subset was procured through a combined deliberate and randomly selected data-sampling procedure. The purposeful sample consisted of the two most informative interviews from each of 25 randomly selected districts, as determined by the interviewers. *Most informative* was defined as those interviews providing a high yield of information regarding the incidence and distribution of the phenomena of DATE program implementation and effectiveness (Marshall and Rossman 1989). From the remaining 25 districts, two interviews were randomly drawn, transcribed, and analyzed. Finally, from the examination of the previous interview data, three complete most informative sets of school district data were purposely selected and transcribed for analysis.

#### 1993 SAMPLING

In 1993, 12 districts from the original 50 were purposely selected to be resampled, based on first-year findings regarding the importance of school district organizational structure (not part of this leaving). One district refused to participate despite the state's mandate, leaving 11 sampled districts. Of these, 7 were from Southern and Central California, 2 from the Bay Area, and 2 from extreme Northern California. As in 1992, schools within each district were selected based on the larger random selection of quantitative districts. Thus schools randomly selected from 1992 were not necessarily selected in 1993. In addition, one of the state's eight largest districts was purposely selected. In this district only, three schools (instead of two) were randomly selected. From the 11 districts, 23 schools were sampled.

At each school, two groups of students were selected by the principal: One group was composed of six students perceived as thriving, and the other

group was composed of six students perceived to be at risk for becoming substance abusers. To ascertain the reliability of first-year risk factor model data, inclusion criteria for each group was operationally defined by principals.<sup>2</sup> Researchers requested that each focus group be composed of all grades (at and above Grade 5) in each school and of equal numbers of males and females. In terms of selection criteria, the principal's perceptions of at-risk students were consistent with 1992 findings. For example, consistent inclusion criteria for the perceived at-risk students were the risk factors of low academic achievement and low commitment to school. The criterion for inclusion in the perceived thriving group was leadership in school activities.

The 1993 sampling process yielded 40 student interviews (20 elementary school interviews, 9 middle school interviews, and 11 high school interviews, representing approximately 240 students). The unit of analysis was the focus group, and all qualitative evidence was considered valuable. When there were more or less students than the proscribed six, data from these interviews were included and analyzed. This process generated 18 complete pairs (perceived thriving vs. perceived at risk) of student interviews, three "mixed"-group (perceived at risk and thriving) interviews, one unpaired thriving interview, and one blank interview (because of recorder failure). The mixed interviews arose from the largest school district. These three mixed interviews offered a means of comparing these data with the at-risk versus thriving groups.

Because of strict anonymity limitations placed on data collection procedures with students, the California State Department of Education did not allow researchers to record the gender and ethnicity of students in focus groups. Nevertheless, in 1993, several district, school, and respondent sampling measures were taken to achieve a gender and minority balance of student focus groups proportional to that of the state of California. First, school districts containing the organizational characteristics desired for study were pooled by the research team. Once pooled, researchers used the California Basic Educational Data System (CBEDS) to select districts that approximated the average daily attendance, gender, and ethnicity balance of the state. This process ensured a gender and ethnicity balance representative of California school districts. Second, after the districts were selected, two schools in each district were randomly selected based on a proportional stratified sample of student enrollment in California schools. This ensured a gender and ethnicity balance representative of California schools. Third, at the student level, the sample was purposely selected to seek out those children and adolescents who were perceived as being at risk for substance abuse, to be compared with those who were perceived not to be at risk for substance abuse. It was believed that principals (or other key informants), who were in constant contact with students and knew the circumstances and charac-

teristics placing them at risk for substance abuse (e.g., familial, discipline difficulties), were most able to select a group that was gender and ethnically balanced (see Note 2). Researchers explicitly asked them to provide such a gender and ethnicity balance. Additionally, on-the-spot interviewers informally noted the gender and minority representation. Through review of comment sheets and discussion with interviewers, we found a gender and minority representation approximating that of the state of California. Through these processes, no one has been excluded from this study because of gender or ethnicity.

#### 1992 DESIGN AND PROCEDURE

In 1992, district contacts and procedures occurred in the following way. A DATE coordinator from each district was contacted through a letter on the researcher's behalf by the California Department of Education, indicating that the coordinator's district had been chosen to participate in the qualitative portion of the evaluation. Researchers conducted a follow-up phone call to arrange a site visit. During the phone contact, each DATE coordinator was asked to arrange a confidential interview with the previously described key informants. Of the seven to nine key informants for each district, the DATE coordinators were informed that the community member and teacher selection was left to their discretion. Coordinators were also informed that no formal interview preparation would be necessary and that a confidential interview area at either the district or the school site should be arranged.

Before each interview, the interviewee was again notified that everything said was confidential, that no one outside the research team would ever see the individual data, and that all reports would consist of only aggregated information in which individual identities were not detectable. Although participation in the study was mandated by the state, ethical considerations made it permissible for interviewees to end the interview at any time (no key informant ended any interview).

Once the key informant gave informed consent, audiotaping began. A semistructured instrument was administered that reflected the sociological and social-psychological processes of developing and implementing the DATE program. To perform this study, three evaluation terms were defined:

1. *DATE programs*: "funding and regulatory umbrellas for diverse local projects that provide service" (Shadish, Cook, and Leviton 1991, 39);
2. *Program services*: drug educational activities constructed and provided on a continuing basis (Sanders 1994, 3);
3. *Development and implementation*: verbal descriptions of how DATE person-

nel participated in decision making, which DATE services were developed and by whom, and how the services functioned.

An interview schedule operationally defining DATE programs, services, development, and implementation appears in Appendix A. Questions were broad enough to allow for new and important information to emerge, yet specific enough that they reflected directly on the DATE program. Follow-up questions were used when the interviewer felt they might enhance understanding of the development and implementation processes.

A total of 11 people conducted interviews. Each interviewer had previous experience with site-based interviewing and was specially trained for the DATE study. In addition to being trained to use the interview schedule, interviewers were advised to respect the integrity of key informants. No information was so important as to justify interaction that might prove threatening to the individual. Interviewers were instructed to end the interview if (a) the confidentiality of the informant was threatened or (b) the interviewee was emotionally involved in the interview to the point that the integrity of the data was threatened. Neither occurred.

Following each interview, a comment sheet containing the interviewer's immediate impressions of the interview was completed and included in the data corpus for analysis. Also, upon completion of all interviews, each interviewer wrote a two- to three-page summary statement of the most interesting observations. Data were subsequently assigned a numeric code for each key informant, the informant's district, and the informant's job title.

#### 1993 DESIGN AND PROCEDURE

In 1993, researchers purposely selected 12 districts for study. A balance was sought among districts with respect to socioeconomic status, demographics, and average daily student attendance. Researchers also sought to include interview data missing from the social network of key informants from 1992, such as the link between local districts and county DATE coordinators. Analysis of this data was considered secondary to the present focus and, therefore, is not reported here. Using the same contact methods as described for the 1992 study year, DATE coordinators of 12 school districts were notified that their districts had been selected for a second qualitative site visit.<sup>3</sup> Prior to visitation, the principal at each selected school was asked to select perceived at-risk and thriving student focus groups.

Students were interviewed in the same anonymous manner as 1992 district respondents. Researchers followed all parental permission and human sub-

jects requirements from each school district. Students were interviewed at the school in a private, secluded area without the presence of any school officials. Two interview schedules were devised, one for Grades 5-6 and one for Grades 7-12. The text of each are found in Appendix B. Finally, before each interview, each interviewer had arranged for clinical assistance for students in case such assistance was required. This information was shared with students at the beginning and ending of each interview. Each student group interview lasted between 30 minutes and 1 hour.

Four interviewers performed all 1993 interviews. Prior experience with 1992 interviews was supplemented with 2 days of additional training, this time emphasizing interview techniques appropriate for student groups. During the training, particular attention was given to methods of interviewing that make explicit the affective responses of students. Awareness of affective responses helped interviewers to be sensitive to students' needs and cultural and ethnic backgrounds. Additionally, interviewers complied with the integrity and anonymity precautions from 1992.

#### 1992 DATA ANALYSIS

The research team consisted of two members who performed almost half of all field interviews and five other team members who performed only data analysis. The team included two quantitative educational evaluators, one former superintendent and educational/organizational researcher, one substance use and organizational/educational researcher, one public health substance use specialist, and two substance use/abuse researchers who performed transcription and were trained for analysis. Members were selected based on their varied background and expertise, providing a range of informed perspectives, and thereby broadening interpretation.

The theoretical approach taken during data analysis is known as symbolic interactionism. From this perspective, cultural meaning is constructed through shared definitions of reality (Blumer 1969; Fine 1993). It is believed that individuals interact with their social and material environment through common linguistic structures. This amounts to a system of symbolic interaction. It is, through an understanding of these shared interactions that the structure of a culture emerges and a social world of participants is defined.

Blumer (1969) hypothesized that to understand the meaning of any social phenomenon, it is critical to gain insight into the various patterns of interaction that define the social world of the participants. By asking people to explain their perception of critical social processes, the grounded theoretical approach uncovers the meaning of shared interactions, the taken-for-granted reality of the culture under study (Berger and Luckmann 1967; Garfinkel

1967; Glaser and Strauss 1967; Strauss and Corbin 1990). These methods result in a real-life examination of occurrences in the DATE program from the perspective of those who develop, deliver, and receive DATE services.

Analysis was conducted at the district, school, and student levels using the constant comparative method. In this method, researchers constantly compared interviewee statements within and between interviews to determine similar and/or dissimilar statements of beliefs and behaviors of those involved in the development and implementation of the DATE program. Through rigorous categorizations of such statements, researchers gained an in-depth understanding of what DATE services were being implemented, why they were being implemented, and how they were being implemented. This method was designed to allow assertions to emerge and evolve as data were compared, ultimately resulting in a set of findings grounded in data. Initially, each researcher analyzed data independently. Then, approximately every 2 weeks, the qualitative team met for 2 days to go over their own assertions and to compare them with other group members' findings. Through researcher interaction during these meetings, consensus was formed about the meaning of the social world represented by the data, thus arriving at the qualitative findings presented in this article.

Findings are supported by exemplary statements taken directly from the data set that meet the criteria of inclusion determined by the working definition of each topic or category. Unless otherwise stated, each exemplary statement is indicative of a majority of statements of that type.

#### 1993 DATA ANALYSIS

All student data were included for analysis. The same analytical methods as previously described were repeated by a subset of the 1992 research team. 1993 data analysis was performed using the same analytical approach as the previous year. Additional work performed was quantitative content analysis (Berelson 1952). Here, the numbers of times that similar types of student statements occurred (obtained through constant comparisons) were calculated. They will be presented as descriptive statistics. Using the interview schedule, implementation and effectiveness were defined in the following ways:

### Implementation

1. Overall extent to which students in both (at-risk and thriving) focus groups described awareness of drug policies (as defined by descriptions of governing principles about school drug enforcement and/or assistance).
2. Overall extent to which students described particular DATE services as delivered by specialists. Specialists are individuals who have special knowledge, status, or communication skills directed toward substance abuse prevention (Gilchrist 1992).
3. Overall extent to which students described particular DATE services. DATE services are defined as descriptions of educational activities that concern alcohol, tobacco, or other drugs and that are constructed and provided on a continuing basis (Sanders 1994, 3).

### Effectiveness

1. Comparative extent (at-risk vs. thriving groups) to which students described DATE services as previously defined. Effectiveness was defined as the extent to which at-risk students would report different and more individualized DATE services than their thriving counterparts.
2. Overall and comparative extent to which students distinguish between substance use and abuse. If service deliverers provide a "no use" message and if students make strong distinctions between substance use and abuse, then effectiveness of services depends on how students discuss the relationship between what services they receive and where their personal understanding arose from.
3. Overall and comparative extent to which students feel that policies are beneficial to them. *Beneficial* is defined as helping themselves or their friends if and when they perceive they have a substance use problem.

Each of these analytical frameworks arose directly from a combination of the formative policy language and the 1992 results.

### RELIABILITY AND VALIDITY

In this study, researchers were aware of a potential source of selection bias. The DATE coordinator, a significant stakeholder, helped to arrange key informant interviews, thereby potentially exerting undue influence on key informants who might put the DATE program's "best foot" forward. At the

same time, given the logistics of this large-scale field evaluation, having the DATE coordinator in each selected district assist researchers ensured that those members of the school district most involved in the implementation were included as informants. Three strategies were employed to minimize the negative effects of potential sampling bias and to maximize the value of having those most closely associated with the DATE program describe the implementation process. First, researchers assured the anonymity of all key informants. Although the DATE coordinators might know who in their districts were interviewed, through arrangement of private interview areas, the reiteration of anonymity before the interview, and confidential coding processes, only interviewers would know what any particular key informant said. Second, organizational positions for which coordinators had discretion to arrange interviews were the same across districts. Third, in addition to those participants selected by the DATE coordinator, researchers designated specific organizational positions (i.e., assistant superintendent responsible for the DATE program supervisor, the district financial officer, etc.) who were required to participate as informants. The multiple cross-district positions represented in the sample made it difficult for any one person to assert undue influence. If it existed, information regarding the application of pressure to key informants was precisely part of what researchers hoped to uncover. Researchers' awareness of this factor provided an early and consistent means of comparison between those selected by the coordinator and those selected by researchers.

The methods of collection and analysis created an effective tool for looking at the potential effects of selection bias (Glaser and Strauss 1967; Kirk and Miller 1986; Strauss and Corbin 1990; LeCompte and Preissle 1993). These methods include collecting confidential semistructured interviews and data analysis using a multidisciplinary team, and performing constant comparisons within and between interviews and study years.

If this were an experimental design, the issue of selection bias might be considered a significant threat to reliability and validity. Instead, in this qualitative evaluation, with the awareness of this potential bias in mind, the data collection and analytical methods helped to uncover informant bias, thus helping to ensure study reliability and validity.

### 1992 FINDINGS

The following findings represent school district personnel's responses to the state's formative policy language. These responses describe a construct



researchers called *the risk orientation*. Data analysis reveals that the risk orientation is the dominant construct informants use as a rationale for program implementation. It includes four elements defining the relationship of the risk orientation to student prevention programming:

1. The terms *substance use* and *substance abuse* are used interchangeably.
2. Using prevention science risk factors, a majority of students are perceived to be at risk for becoming substance abusers.
3. When describing their mission to work with at-risk students, informants equate *at risk* and *high risk*.
4. There is a noticeable absence of discussion of protective factors to prevent substance use and/or abuse.

We present exemplars of the risk orientation in the same order as the elements described above. We use both the terms *informant* and *respondent* when referring to key informants.

The terms *substance use* and *substance abuse* are used interchangeably. Informants discuss substance use in the same way they discuss substance abuse:

Respondent (R): I'd like to think the message is, drug abuse is life abuse, which is our slogan and everyone knows that slogan. I think the message is that drug, alcohol, and tobacco, substance abuse or substance use, is not acceptable.

Interviewer (I): So use equals abuse for any of those substances?

R: Yes. (no. 292, 5)<sup>4</sup>

Respondents described any substance use as abuse. The following exchange, typical of interviewers' probing for accuracy, confirms the interpretation of the use/abuse equation:

I: Drug-free meaning?

R: Alcohol-, drug-, tobacco-free world.

I: So, then, I don't want to put any words in your mouth, but my impression is that any use of any of these substances by students equals abuse?

R: Yes. (no. 227, 3)

These excerpts show how the terms *substance use* and *substance abuse* are used interchangeably.

Using prevention science risk factors, a majority of students are perceived to be at risk for becoming substance abusers; when describing their mission to work with at-risk students, informants equate at risk and high risk. We link findings two and three because informants often linked them. When describing who a typical at-risk student was, informants used individual and inter-

personal prevention science risk factors to link students, their families, and a possible dependency on some type of drug:

I: What is the problem?

R: The problem is that they're [students are] living with families, someone in their family is dependent, some kind of dependency on some type of drug, so you know that it affects their personality. (no. 231, 6)

As stated in the 1991-1992 DATE application, "family substance use" represents a description of a substance abuse risk factor (California Department of Education 1991-1992, 3). When it comes to the potential for substance abuse, many informants also believed a majority of students fit into this at-risk category:

R: We are addressing the risk factors that show up, with the idea that it's real hard for me to point out which of our kids are not at risk. (no. 014, 13)

The first exemplar shows that the at-risk student is seen as possessing risk characteristics as defined in the prevention science literature. The second exemplar shows that informants perceive a majority of students as being at risk for substance abuse. In one important statement, these two ideas are brought together with two additional dimensions found throughout the data set. When asked to state the mission of the DATE program, another respondent stated:

R: I think that it is to identify and provide services for high-risk students.

I: What about non-high-risk students?

R: If you look at our district demographics, we have a ton of kids that are high-risk kids, we have a high Chapter 1 count, we have a high Special Ed[ucation] count, so that means a majority of our kids, I would consider at risk anyway. We have a whole lot of at-risk kids. High-risk kids are kids that have a discipline history, they are kids that have poor attendance rates, they are kids that we know that are having lots of CPS [Child Protective Service] referrals, so they're going to take a different level of intervention. (no. 210, 4)

Here, wide-ranging constructs such as "discipline histories," "poor attendance rates," and "lots of CPS referrals" define the respondent's notion of both at risk and high risk. "Special Ed." and "Chapter 1" are used as referents to at-risk populations. In the same way that use was equated with abuse, at risk was equated with high risk. The mission of district informants is to identify and assist these students.

There is a noticeable absence of discussion of protective factors to prevent substance use and/or abuse. In qualitative research, when comparing incident after incident of data occurrences, it is considered of proven theoretical relevance to observe concepts that are repeatedly present or absent (Strauss and Corbin 1990). Although protective factors are mentioned in the DATE application, the noticeable lack of discussion of protective factors as a strategy in substance use and abuse prevention showed that the risk orientation was of primary consideration to the majority of key informants.

In contrast, a few respondents described alternatives to the risk orientation. Rather than focusing on at-risk students, a minority of key informants described developing and implementing services in which cultural norms are taken into account and distinctions between substance use and substance abuse are made (see Appendix C). The few respondents taking this alternative view displayed a notable absence of the risk orientation.

In summary, the 1992 findings support two significantly different orientations described as influencing the development and implementation of DATE services. Those taking the predominant point of view, the risk orientation, shared the following four characteristics:

1. The terms substance use and substance abuse are used interchangeably.
2. Using prevention science risk factors, a majority of students are perceived to be at risk for becoming substance abusers.
3. When describing their mission to work with at-risk students, informants equate at risk and high risk.
4. There is a noticeable absence of discussion of protective factors to prevent substance use and/or abuse.

Informants' use of the risk orientation confirms a transfer of policy from the state to local school districts. A majority of respondents who discussed service development and implementation demonstrated a clear understanding of state policy, and they used the risk orientation as a guide to develop and deliver services. These results reveal the social processes underlying the development and implementation of the DATE program at the district personnel level. However, 1992 findings did not explain the effects of these processes and services on California's students. Consequently, in 1993, as previously described, a student-focused round of data collection and analysis was undertaken. The following are those results.

## 1993 FINDINGS

### DATE PROGRAM IMPLEMENTATION

*Drug policies.* To assess implementation of drug policies, researchers calculated the overall extent to which students described awareness of drug policies. Regarding drug policies, overall content analysis showed that in 39 of 40 interviews (97.5%), researchers found clear student descriptions of substance use/abuse school policy.

Almost all policy-relevant data emerged around enforcement issues. When asked or when volunteering what happens to a student who is caught using a substance at school, over 90% of the student groups reported one or more of the following three elements: detention, suspension, or expulsion. The following excerpts from different school-level focus groups are representative of the entire data set:

Elementary, Thriving:	Middle School, Risk:	High School, Risk:
R (first respondent, male): They might get suspended or just get a referral, might even get expelled.	R: They get kicked out  R: Expelled.	R: First, they tell you that you're suspended for so many days, then you're up for expulsion.
R (different respondent, female): One of my friends, they got suspended and they really got in trouble by their parents.	I: They get expelled? Anything else happen to them? Or is there anything good that happens for them?	I: That's it? R: I guess.  I: Have any of your friends been busted?
R (second respondent, male): A couple of girls in my class right now they were smoking last year . . . [and] they got caught smoking in the rest room . . . and they got suspended for like three days. (no. 562, 12)	R: All I know, from what I know they got expelled. That's about it. (no. 552, 9-10)	R: Yes. Right now, they're up for expulsion right now. To be expelled and then they would have to go to another school, I guess. (no. 506, 13)

These results indicate that both perceived at risk and thriving groups are aware of unambiguous drug policies. Overall, it can be said that student groups at elementary, middle, and high school levels are aware of the consequences of being caught using substances at school. This demonstrates implementation of school drug policies. Few descriptions of policies designed to assist students were found. This is important because it shows the overall orientation in schools is toward enforcement of "no use" policies.

TABLE 1: Services Most Frequently Reported by Student Focus Groups, by School Level

	Elementary School (n = 20 focus-group interviews)	Middle School (n = 9 focus-group interviews)	High School (n = 11 focus-group interviews)
DARE	76.19	19.05	4.76
Health/science courses	17.65	41.18	41.18
Assemblies	41.67	25	33
Red Ribbon Week	27.27	27.27	45.45
Counseling	11.11	22.22	66.67

NOTE: 100% of each particular service can be gained by adding together cells in each row.

*Program specialists.* Here, implementation was assessed by the extent students described particular DATE services as being delivered by specialists. Overall (in 95% of focus-group interviews), students reported specialists present to implement DATE services. In 21 of 40 interviews (52.5%), students reported that police officers, specialists trained to deliver DARE curriculum, came into their classrooms to deliver DATE services. Twelve student focus-group interviews (30%) reported that specialists were brought in for antidrug assemblies. In 8 of 40 focus-group interviews (22.5%), students mentioned counselors as specialists.

*DATE services.* Researchers examined the overall extent to which students described particular DATE services. In the following, we describe percentages of the five most frequently mentioned DATE services throughout the student interviews. Results were calculated by accounting for all services mentioned in each focus group. For example, if DARE and health courses were mentioned during an interview, regardless of the number of times mentioned, this would be counted as mentioning two services. Of the many types of DATE services, DARE was most frequently mentioned (52.5%), followed by health/science courses (42.5%), antidrug assemblies (30%), Red Ribbon Weeks (27.5%), and counseling (22.5%).<sup>3</sup> These results indicate that in 38 of 40 focus groups (95%), students reported receiving at least one DATE service. Only two student focus groups reported receiving no DATE services. Note that only counseling represents what might be termed an individualized DATE service. Every other significantly mentioned service is delivered to groups of students. These results are important because they describe the student perspective of implementation and because they support earlier predictions of mass application delivery services.

Table 1 describes the most frequently reported service results with respect to the school level. What is notable about the results is that DARE and antidrug assemblies are most frequently reported at the elementary school level. The remainder of this data indicates that most Red Ribbon Weeks and counseling are reported at the high school level; health courses are most frequently reported in middle and high schools. In confirming percentages of implementation reports, these findings corroborate quantitative implementation findings. In the larger quantitative data set, for example, in 120 school districts, personnel reported delivering DARE in 49% of schools (Romero et al. 1993, 4-15). This compares with 52% of our student focus groups reporting DARE services. Additionally, in the larger quantitative data set, 41% of school district personnel reported implementing health curricula (Romero et al. 1993, 4-15). This compares with 42% of students in student focus groups who reported participating in health/science curricula. Such cross verification using alternative data sources provides triangulation of data (LeCompte and Preissle 1993). The following are excerpts from student interviews that typify the knowledge students retain and report from the services they receive. Exemplars are presented from all three school levels. Excerpts represent both at-risk and thriving points of view at each level:

## High School, Thriving:

R: Um, just the dangers of alcohol. They show you the long-term effects of all different, alcohol abuse, or any type of drug addiction and then also like, there's a section on eating disorders and suicide and like, different cancers . . . the chemical like for chemistry, the chemical equations of what happens and how things decompose with alcohol . . . the biological aspect of the blood alcohol content, et cetera, and they also do sociological things. What it means in terms of family structures and the effects of alcoholism among families and things like that. Lots of statistics.

R: We're shown films. They're a lot of things that you see through high school, brochures. (no. 544, 2)

## Middle School, Thriving:

I: Just tell us about the different times that you learned about it, what you learned.

## High School, Risk:

I: How about the health and science class, what do they, what kinds of things do they teach you there?

R: What it does to your body. Like what it does to your insides, what your brain cells . . .

I: Do they show you like black lungs and . . . ?

R: Yeah! They show us like movies and stuff. What happens if you drink and drive. (no. 545, 4)

## Middle School, Risk:

I: I'm wondering if you guys can tell me about the different times that you learned about drugs at this school.

- R: Oh, I learned it all last year. A lot last year.
- I: What did they say?
- R: Um, just about how bad they are.
- I: Can you give me a real specific example?
- R: That it can lead into bigger problems. I guess that's the main thing. And you hurt your family and friends and it's . . .
- I: Did they show you pictures?
- R: They showed us the real stuff. A big case of it, in glass, of all kinds of different stuff.
- I: Different kinds of drugs?
- R: Yeah, marijuana and heroin balloons.
- I: So, they show you drugs?
- R: Yeah. We went to a show, too, Washington, D.C., the FBI Building, and they had lots of drugs there. We got to see them there. But, we didn't really get to talk to them there. (no. 507, 1)
- Elementary, Thriving:  
R: Ok, in third grade the deputy came and he taught us about like "say no" and all that . . . Deputy J. and now he is talking to us about the same thing.
- I: So you said "Just Say No," is that what they teach you?
- R: [several voices] Yes.
- R: Teaching us things to say when we don't want to do it, like how to say no and how to keep your friends at the same time.
- I: Do you like what the deputy is teaching you?
- R: [Several voices, some responses
- R: [long pause] Well, we learned it in DARE. Our Deputy L. comes in once a week and he tells us about drugs, alcohol, and stuff like that.
- I: Have you all had that?
- R: Yes. [in unison]
- I: What was that like for you? What did they tell you or what did they teach you or whatever?
- R: He told us about drugs and not to use them, what it can do to you. Like on TV commercials, they don't tell you what it can do to you, like if they're selling beer. All that stuff.
- I: Do you guys agree with that?
- R: Yeah. And sometimes he jokes around with us. Once he told us this story about a dog who hung onto the back of his truck while he drove down the street! (no. 508, 1)
- Elementary, Risk:  
R: Yes, like for marijuana you like forget, you can get cancer...
- R: You get high and forget stuff.
- R: LSD causes hallucinations.
- R: Well, Deputy L., he was saying that if we chew like chewing tobacco that our gums will turn all brown and will start peeling away from our teeth.
- I: What did you think of the pictures? What other kinds of pictures did you see?
- R: [Several voices speaking at once]

- spoken enthusiastically] Yes. It was gross. It was ugly. It was nasty. (no. 533, 2-3)
- I: Everybody does?
- R: [several voices] Yes.
- I: Why do you like it?
- R: Because it's nice to know just in case you get in that situation and somebody asks you [nervous laugh]. You know, how to say no. (no. 532, 1-2)

The previous excerpts are typical of student focus groups' responses to the question "What did you learn?" Although in some cases, researchers found a qualitative difference in students' ability to articulate what they learned, both at-risk and thriving groups described curriculum focusing on the harmful effects of substance use as abuse. The process of delivery in the health/science class is the same for both groups. It is certain that the harmful effects of substance use/abuse have been taught and, for the most part, retained as retrievable knowledge by students.

#### DATE PROGRAM EFFECTIVENESS

In this section, we present some of the most important findings of this evaluation. The following are results describing the extent to which the DATE program achieved its goals of providing effective services for all students and special services for at-risk students. These findings are accompanied by student perceptions of DATE services.

*Special services for at-risk students.* To assess the extent to which DATE services were targeted toward at-risk youth, researchers examined the extent to which at-risk students reported DATE services as different and/or more individualized than did their thriving counterparts. Table 2 describes the five most frequently reported DATE services as a function of school level and risk status (at risk vs. thriving). Among the top-five reported DATE services (in order of presentation) and all school levels comparing at-risk and thriving students, there is no discernible pattern of service differences; nor is there a pattern of at-risk youth reporting more individualized services (counseling) than thriving youth.

*Substance use and abuse.* Researchers examined the overall and comparative extent to which students distinguished between substance use and abuse. Content analysis revealed that in 37 of 40 interviews (92.5%), students made very clear distinctions between substance use and substance abuse. This

TABLE 2: Five DARE Services Most Frequently Reported by Student Focus Groups, by School Level and Risk Status

	DARE	Red Ribbon Week	Health/Science Courses	Assemblies	Counseling
Elementary school (n = 20 focus-group interviews)					
R	8/2	1/9	1/9	2/8	1/9
T	8/2	2/8	2/8	3/7	0/10
Middle school (n = 9 focus-group interviews)					
R	1/3	1/3	3/1	2/2	0/4
T	1/2	0/3	2/1	0/3	2/1
R + T	2/0	2/0	2/0	1/1	0/2
High school (n = 11 focus-group interviews)					
R	0/5	1/4	4/1	3/2	2/3
T	1/4	3/2	2/3	1/4	4/1
R + T	0/1	1/0	1/0	0/1	0/1

NOTE: For each pair of numbers, the first number indicates the number of focus groups in which students reported receiving that particular service; the second number indicates the number of focus groups in which that particular service was not reported. R = at-risk students; T = thriving students; R + T = mixed, at-risk and thriving students.

was defined by the extent to which specific substances were described, and an example is provided showing use or resultant behaviors not perceived to be harmful versus use or behaviors that are. On 74 occasions in 37 interviews, students described the distinction between use and abuse. The following qualitative excerpt from an elementary thriving group is an exemplar of this type:

First R: Like if he asked me—it's just kind of like the person, like, see my uncle, he can drink and he won't get drunk and then my other uncle, he can drink a couple of beers and he will get drunk and get into stuff.

Second R: Like my dad, he can drink like three or four beers and he doesn't really get drunk, he gets kind of weird [said with a kind of laugh], but he doesn't get drunk and my mom, if she drinks anything alcoholic, she gets really sick, because he, I mean, my dad used to drink more than he does now. I mean, lately he has maybe one beer a month and my mom doesn't drink. So, it just kind of depends on the attitude of the person before they drink, too, because if they're already violent then if they drink, they might get even more violent and then if it doesn't bother them, you know.

I: Does the DARE officer teach you those things?

R: No, not really.

R: hard to identify: I don't think so.

I: So how did you come to know that? Just by watching?

Second R: You just kind of know it. [short laugh] [second respondent says "Yes" in the background] You know just by observing your surroundings and you can tell how people act. I mean, all families have different examples of stuff but you can just about get any family with somebody that drinks. (no. 567, 5-6)

The preceding passage is important because it exemplifies the use/abuse distinction that even the youngest student groups made. On this dimension of effectiveness, there was a developmental component. It appeared that as school level increased, so did the sophistication of distinctions between use and abuse. The prevalence of the use/abuse distinction is a negative indicator of effectiveness. There is evidence that the program is in place, that the students hear the message that use equals abuse, and that there are harmful consequences for any substance use. However, because students consistently distinguish between substance use and abuse and because service deliverers teach that use equals abuse, this finding suggests that, at best, the influence of service deliverers is limited.

Compared with the previous elementary school distinction between use and abuse, when middle school students discussed the use/abuse distinction, they described their dissatisfaction with what they had received in school, linked with the fact that service deliverers had not made such a distinction. The following data show that these students have both heard and understood the "no use" message but that they question the veracity and the motives of those providing this information:

R: I think it's nothing! It's exaggeration!

R: They lie to you so you won't do it!

R: Oh, they lie to you so that you won't do the drugs! They think you're dumb!

I: Do you think that works?

R: No. [laughs]

I: Do you think that's what they really do?

R: Yeah, sometimes. (no. 508, 10)

By shifting discussion from a mere distinction between use and abuse to embedding this discussion in a context of drug education, this middle school data represent a more sophisticated understanding of use and abuse than that of the elementary-level students.

Compared with the middle school students, when making a use/abuse distinction, high school students shift their perception to the context, type of

substance used, and level of use:

R: Get drunk at a party is fine! Mothers Day, get drunk! I'm not saying for me . . . I'm just saying these are parents, right? If my mom gets drunk, I don't care! On Mothers Day she totally had a good time, but she didn't drive home. She felt sick in the morning, but she had a good time and that's fine. If I knew she was an alcoholic, I'd get her help! But, yeah, she gets drunk, but not every day! Not once a week!

I: Okay.

R: She does have drinks though.

I: Is that what they teach you in the classes?

R: No. [in unison]

R: They teach us that everything is bad!

R: Yup!

R: It's just flat out bad. (no. 507, 14)

These findings show that student distinctions between use and abuse occur at all school levels. Similar to other research findings, this evidence shows that students make use/abuse distinctions based on elements found in their social world (i.e., types of substances, levels of use, and using circumstances; Klitzner 1987; Shedler and Block 1990; Baizerman and Compton 1992; Brown and Horowitz 1993). Their understanding of such distinctions emanated primarily from sources outside of schools (e.g., family members and friends). Our evidence suggests that as students become older, the difference between their drug education and personal knowledge becomes a significant source of dissatisfaction with DATE services. This finding is important because it shows that service deliverers are not having a significant influence on student attitudes or behavior. Furthermore, it shows that as students get older, their perception of such inconsistencies causes dissatisfaction.

Although this is not an experimental study—that is, we do not maintain a cause-and-effect relationship between the state, the risk factor model, and student program perceptions—these findings do suggest that some of the program difficulties may be traced to the differences in perceptions between school district personnel and students.

**Policy effectiveness.** Here, researchers examined the overall and comparative extent to which students felt that policies were beneficial to them. This item includes the student data describing their affective response to clearly delineated policies. Do perceived at-risk and thriving students feel the same or differently about the primary drug policies? A majority of students discussing this topic felt that the punitive policies for substance use were not supportive of peers who needed help with such problems:

High School, Risk:

R: I don't think the schools are for like helping; it's just for getting the bad kids out and it's just . . .

R: Yeah.

R: Especially at first, if you need help they tell people to go to like [name of institution], get your fix, you know, come back and we'll get you back on your feet, you know? . . . They are not in this for helping you; they are in for getting rid of the bad kids and just having all good kids in school. [spoken very emphatically]

A different R than the others above: Well, maybe if you could get them to care more then they would do that.

R: If they suspect you of smoking or having drugs on you or whatever, if they see a kid like that in their school, then, instead of suspending them and getting them out of school, why don't they help them? (no. 531, 21)

High School, Thriving:

R: Yes, because I do know, I had a friend who had a real rough time trying to go straight!

I: 'Cause there wasn't any help available?

R: There, at this school, no! [very emphatic]

I: Is anybody here aware of what you do if you had a friend say, who was real involved and you wanted to try to get 'em off drugs? Is there any resource here that you know about?

R: Not really.

R: No.

R: I haven't heard of any.

R: Not at this school! (no. 593, 8)

In addition to students' doubting the veracity of the information they receive, these results show that a majority of students are aware of what a drug problem is; they question why the school is not helping them or their friends when they have a such a problem.

## CONCLUSION

### SUMMARY OF FINDINGS

Figure 1 summarizes the major findings of the research. Researchers have shown that from the formative policy language, a majority of school district personnel use the risk orientation as a guide for their DATE services. The risk orientation includes four factors: the perception that a majority of students are at risk for substance abuse (equated with use), the equation of at risk with high risk, a mission to identify and serve at-risk students, and the notable absence of discussion of protective factors. These findings show how forma-

Formative Policy Language: To gain funding, schools must direct programs toward "at-risk" students.

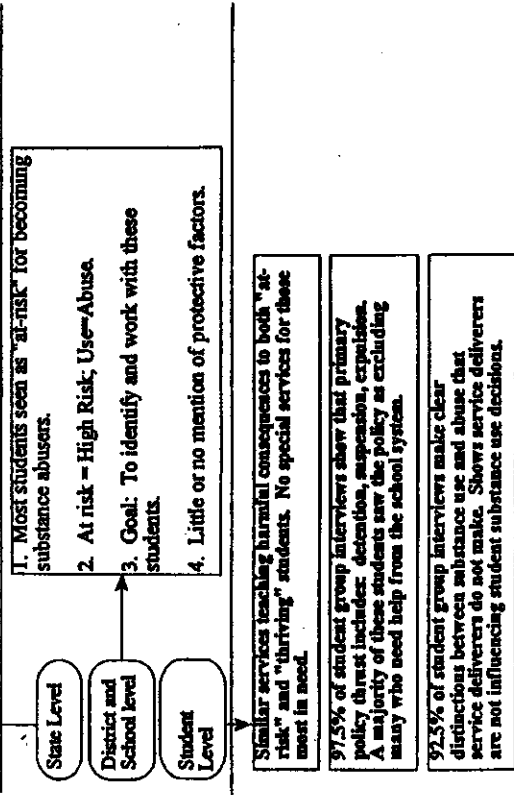


Figure 1: Student Effects as a Function of Risk Factor Model Implementation

tive policy language provides for a transfer of DATE policy from state to school.

The effects of this transfer are found in the student data. Researchers found that "no use" policies were being highly implemented; many specialists were reportedly delivering DATE services. It was found that students primarily distinguished between substance use and substance abuse. Because of the disparity between the sophisticated experiences students described and the drug education services they described, we found that as school level increased, perceived credibility of service deliverers decreased. Finally, many students wondered why DATE services were not helping those most in need of such assistance and instead were often purging them from the educational system. Although students perceived to be at risk for becoming substance abusers were identified, both at-risk and thriving students said services for those in need were not forthcoming.

GENERALIZABILITY

Because the 1992 data came from a random sample of key informants from the state of California, we can extrapolate these results to all California school districts. Among district personnel, the risk orientation is prevalent in the state of California. The 1993 findings must be examined with discretion because the districts were purposely reselected from a previously selected random sample, schools were randomly selected, and students were purposely selected. Minimally, these results can be generalized to students in the state considered to be at risk for substance abuse and for thriving students. Because there was some triangulation of the data (between student and school district personnel reports of service implementation; Romero et al. 1993), one might assert that these findings could be generalized to California's students as the whole.

DISCUSSION

Regarding policy, the formative "at risk" language shapes the perceptions of those developing the programs. Supporting Edelman (1964), the formative role of policy language is seen as symbolic. Also, commensurate with Placier's (1993) findings, policy language is so general that it provides a suitably ambiguous operational structure for the DATE program. Yet, at the same time, districts were aligned toward a highly visible and publicly reassuring risk orientation. After using the symbolic prevention science language to discuss the DATE program, almost anything could qualify as a

DATE service. Furthermore, given that there exists 36 risk factors (Coie et al. 1993; Hawkins, Catalano, and Miller 1992), almost any student can rightfully be considered to be at risk for substance abuse. The data support the hypothesis that because of the policy and prevention science language and the consequent perceptions, mass-application program services like DARE, Red Ribbon Weeks, assemblies, and health and science courses can be supported. Indeed, among the top-five mentioned services, only counseling represented a venue in which students could individually and confidentially discuss substance use issues. If the substance abuse problem is as prevalent as many school district personnel think, then many more students than previously thought need individualized intervention.

Regarding policy and practice, there is another point to be made. Mass-delivery services serve multiple purposes. For example, DARE and Red Ribbon Weeks are highly visible public services. DARE, in particular, provides prevention services and an officer for school security. At the same time, by implementing mass-application services, district personnel can say they have complied with DATE service delivery requirements. This study supports other recent evidence showing that formative policy language provides the symbolic rationale for mass delivery of ineffective services like those found in DATE (Ennett et al. 1994; Wysong, Aniskiewicz, and Wright 1994).

When considering the student perspective as a set, it is difficult to escape the conclusion that use of the risk-based model of substance use and abuse does not appear to help these students. In fact, evaluation evidence suggests DATE services are associated with a significant degree of psychological dissonance, excluding those perceived by both students and district personnel as needing help.

From prevention science literature, principals used risk characteristics such as perceived family substance use and a low commitment to school to select at-risk students. However, what they demonstrated in practice was that by using such wide-ranging characteristics, they were able to place "a majority" of students in this category. As we saw, this has serious implications, best described by Baizerman and Compton (1992). When discussing the resultant processes of identifying at-risk youth, they state:

In many schools, this process results in the majority of students being identified as at-risk. This is hardly surprising, since the educational use of the term "at-risk" does not meet the test of the public health definition—that is, it is not known whether the characteristics used for identification actually predict which students are most likely to drop out of school. . . . [T]he whole field of education used the concept of risk as part of an ideology, thereby joining science, mathematics, and morality. The major use of this ideology is to construct a socioeducational population of at-risk students and suggests that they are both

the problem and its cause. The school is absolved and can be expected only to "do the best with limited resources." Whole schools and even districts are not thought of as being at-risk; the problem and its sources are the students. (pp. 8-9)

Our evidence supports Baizerman and Compton's research and takes it a step further. Students at all grades in this evaluation are sensitive to the practices of school authorities. According to them, school drug policies are used more as a tool for "getting rid of the bad kids" than really providing help to potential substance abusers. By middle school, these students report that courses teaching "harmful consequences" and "use equals abuse" combined with exclusionary practices (detention, suspension, expulsion) have three negative effects. DATE programs

1. result in developmentally inappropriate programs, which, in turn, result in increasing sources of unnecessary dissonance for many students;
2. undermine the school personnel's credibility by giving students only one perspective, which students perceive as biased; and
3. help create policies that exclude those whom students themselves recognize as most in need of help and drive those who already might be on the margins of the school system further out.

These findings should be further explored longitudinally, with student data as its research centerpiece. However, when students described complex decision-making processes to define substance use as experimental or abusive, they supported Quandrel, Fischhoff, and Davis's (1993) research. This research showed that adolescents are reasonable judges of risks associated with their own lives. Compared with experimentation, even the youngest students recognize a substance use problem. Of experimental use, Newcomb and Bentler (1988) found that "In fact, experimental use of various types of drugs, both licit and illicit, may be considered a normative behavior among contemporary U.S. teenagers" (p. 214). Nevertheless, these DATE results show that although the "no use" policies and messages may be highly visible and publicly reassuring, even the youngest students, through their use/abuse distinctions, are telling us that if we do not acknowledge societal norms and rites of adolescent passage, such policies and programs will be ineffective.

These ideas become especially salient when looking at protective factor research that shows that bonding to any significant adult can help even the most at-risk students become positive decision makers (Werner 1986). Curiously, these precepts were absent in the service deliverer data but present in student data:



R: They have like this guy, he had been through a lot and he came to the school. He talked to everybody like they were his family or something! And a lot of people responded to that. And they went up and talked to him after or talked to him on the phone, they talked to him.

I: He really touched students?

R: Yeah! [In unison] And some students dig that and some students believe that the guy was just conning, just not serious. But, he seemed normal.

I: What do you guys think? What could the school do to help kids?

R: Yeah. I think that the teachers that have no, teachers that are young, there's this one English teacher and he's young and I think kids look up to him, kinda. So, I think he's an influence in that. So maybe the kids talk to him more.

I: They trust him more?

R: Yeah. 'Cause he's funny and not like, do this and do this! The kids like him and they look up to him. (no. 545, 17-18)

In the current school-based drug education process, it appears that policy-makers view schools as a vehicle to change widespread social norms, ignoring the effects of popular culture, family experience, and cultural differences.

When we discuss the prevention science of DATE, what becomes evident are the effects of the War on Drugs as it is waged on students. For example, in the 1970s and early 1980s, there were attempts to understand and educate students on the differences between substance use and abuse (National Institute on Drug Abuse [NIDA] 1981). Adolescent substance experimentation, although not promoted, was seen somewhat as a dialectic of growth (Jessor and Jessor 1977). However, in the mid-1980s, researchers and policymakers alike shifted their perception of adolescents (Brown and Horowitz 1993). The new view of adolescents became one of deviants in need of help. This was depicted through evidence from correlational research built on the relationship between any substance use and delinquency (Hawkins et al. 1987). This research would come to provide the undergirding for our national drug control strategy that stated:

School-based prevention programs should be reinforced by tough, but fair policies on use, possession, and distribution of drugs. . . . We cannot teach them that drugs are wrong and harmful if we fail to follow up our teaching with real consequences for those who use them. . . . Policies like these have been criticized for addition to the dropout problem. But experience shows that firm policies fairly enforced actually reduce the numbers of students who must be expelled for drug violations; most students choose to alter their behavior rather than risk expulsion. (The White House 1989, 50-51)

Unfortunately, these policies were based on incorrect premises. In fact, the National High School Survey results reveal that student-reported alcohol and

tobacco use has remained stable over the last few years at around 87% (alcohol use) and 61% (tobacco), with marijuana use rising to over 35% (Johnston, O'Malley, and Bachman 1993). There is no evidence that "most students choose to alter their behavior rather than risk expulsion." Our evidence suggests that the War on Drugs promoted a "get tough" view of dealing with students supported by a prevention science that illuminated a deviant view of them. The get tough view was to detain, suspend, or expel those who demonstrated substance-using behaviors. From this, an interesting paradox arises. The policy found in the DATE program, part of the War on Drugs, provided monies to help students in need, but these students describe being excluded; the ones not excluded look elsewhere for credible drug information, to avoid the lies and exaggeration they find in school-based educational services.

From this evaluation data, we pose a deeper question: Should schools be responsible for drug education? Over 20 years, there has been no consistent evidence that services, such as those discussed, prevent either substance use or substance abuse (Klitzner 1987; Moskowitz 1989). However, because of the maladaptive view of adolescents, this study shows what has been previously postulated: that such services can do significant damage to adolescents (Baizerman and Compton 1992). Based on new funding, DATE services were expected to be part of a new breed of drug education. Instead, the focus of most of these services, to teach the harmful consequences, is over 20 years old (Brown and Horowitz 1993). Today, DATE service coverage is staged in two ways: (a) augmenting existing services by (b) bringing in specialists. As we have demonstrated, rather than focusing on adolescent processes of development, these educational methods and policy goals are based on the interrelationship between symbolic politics and education. Nevertheless, during this time of vast educational cutbacks, drug dollars are desirable, so cursory and politically desirable educational services are delivered. This often takes place at the expense of the counseling support needed by our most troubled students. In light of increasing evidence that current policy and program directions are ineffective, it is time to reexamine certain drug educational policy directions.

This study has shown the relationship between risk-based substance abuse policy, practice, and its consequent effects. The results force researchers to call into question the usefulness of both the policy and the practice of risk factor prevention science. If we are really going to positively affect adolescents, then substance use education policies and services must be shaped in accordance with students' sophisticated perceptions. This is not to argue for promoting substance use. Rather, it is to argue for the end of labeling, which, as we have seen, has detrimental effects. Instead, we argue for a developmen-

tally appropriate set of prevention services, recognizing the norms and, as Shedler and Block (1990) have shown, the normal, psychologically healthy aspects of adolescent experimentation. Most important, it is to argue for helping those who truly need help. This argument can best be heard in the voice of a school district respondent:

R: We still get rid of too many kids. . . . Those are the kids that the state of California and the United States of America have identified as their target population . . . . The kids that are at risk the most are the kids that are exited from the system, and they do not have access to the resources . . . . The kids that we need to keep in and provide resources to are the kids that we exit from the system. (no. 558, 18)

Services designed with these ideas in mind lend themselves to two critical ramifications. First, by shaping policies based on inclusion, we will relieve ourselves of the rhetorical burden of the War on Drugs. Second, by creating services that are credible with most students, we will also allow them to maximize their responsibility for their actions.

After years of substance abuse prevention science research, the evidence presented here forces researchers to question whether the risk factor prevention model is an appropriate tool for achieving the desired goals. Why? Some may argue that the risk factor model was never fully implemented as intended and that, therefore, the DATE program is not a valid test of the model. We disagree. Given the policy transfer of the model from state to school and the use of risk factors to identify students at risk for substance abuse, the DATE program stands as one of the largest scale attempts to implement this model. It has failed for two reasons: First, in California schools, the risk factor model is misused as an individual diagnostic tool. Before researchers ever asked principals to identify individual at-risk students, the 1992 results showed that school district personnel used risk factors to identify students who were at risk for substance abuse. Prevention science risk factors may be related to populations of students (Coie et al. 1993; Hawkins, Catalano, and Miller 1992), but there is little evidence that they predict substance abuse in individual students. Moreover, protective factor research shows that most at-risk adolescents do not go on to become substance abusers (Werner 1986). Second, it is inherently difficult to implement. Our evidence suggests that although the practice of identifying such students occurred, it appeared impossible to implement individualized services. To develop and deliver individualized services to students placed in the "at risk" category may be beyond the resources of schools. The evaluation research presented here asks researchers to reconsider this model as policy and as a school-based substance abuse prevention tool.

## APPENDIX A 1992 Interview Questions

### General Questions

1. Compared with today, what was the DATE program like at the beginning?
2. How are DATE activities planned?
3. What is the mission of the DATE program? Who would you say shares that mission with you?
4. In attempting to achieve the DATE program's mission, what represents a high level of quality?
5. What are the DATE activities at the selected school sites?
6. How do you decide whether these DATE activities are having a positive effect on students?
7. Relative to DATE activities, when there is a conflict between the district and the school, how is this conflict resolved?
8. For staff involved in funding: When you are deciding where to put monies, how do you decide what the priorities are?  
For staff not involved in funding: Do you feel that monies for the DATE program are going into the right activities?
9. For people in supervisory positions: Suppose your employees are reluctant to implement a DATE program or activity you asked them to implement. How might you get them to comply with your request? Suppose they still do not follow your recommendations. What might you do then?  
For people in subordinate positions: When your DATE supervisors ask you to "go along with the program," why do you do so? (If they say they do not, ask why not.)
10. How has the community influenced DATE activities?

### Personnel Questions

11. Who do you work with most often and most closely? When you are working with these people, what are some of the things that you do?
12. Over the last three years, how many DATE-related personnel changes do you feel have been made? (Here, DATE personnel includes personnel potentially having anything to do with DATE.)

### Implementation Questions

13. When students experience DATE-related curriculum, what are they likely to be doing and experiencing?
14. What do you feel are the differences between what the district wants done, what the schools implement, and what the students experience?

### Final Question

15. In your mind, what is the difference between what DATE activities should be implemented as compared to what actually is implemented?

## APPENDIX B

## Questions for 1993 Qualitative Instrument Schedule

## Questions for Older Students (Grades 7-12)

Ask as first question for all participants, except younger students.

What, in your mind(s), is (are) substance abusers?

What, in your mind(s), is (are) an at risk student(s)?

1. What classes and/or programs have you participated in that discussed alcohol, tobacco, and/or other drugs?
2. Probe for counselling: What else would you like to see in the way of alcohol, tobacco, and drug classes and/or programs?
3. How many of your friends do you think have an alcohol, tobacco, and/or drug problem, and, if they do, how do you decide they have a problem?
4. In your opinion, what is most likely to happen to a student who is caught using alcohol, tobacco, or drugs?
5. Why in your opinion do you think another student would use alcohol? Why in your opinion do you think another student would use tobacco? Why in your opinion do you think another student would use other drugs?
6. Generally, how do you feel about the people who have either taught you or tried to help you regarding alcohol, tobacco, or drug issues?

## Questions for Younger Students (Grades 5-6)

1. Can you tell us about the different times you learned about drugs?
2. How do you feel about the people who have talked to you about drugs, alcohol, and tobacco? [Probe: Who would you like to have come talk with you?]
3. What would you do if somebody that you really cared about told you that drugs were OK?
4. How many of your friends do you think have tried alcohol, smoked cigarettes, or taken drugs?
5. A lot of kids are curious and want to try stuff a lot. What would you do if one of your friends offered you a cigarette?
6. Do you know of any of your friends who use that stuff? (cigarettes, alcohol, tobacco)
7. If somebody is caught at school smoking a cigarette, what happens to them?
8. Do you think it is important to tell someone if somebody smokes or takes drugs?
9. Why do you think kids smoke? Why do you think kids take drugs? Why do you think people drink alcohol?

NOTE: Question 1 for younger students should really be asked in place of Question 1 for older students, too.

## APPENDIX C

## An Alternative View to the Risk Orientation

In accordance with the alternative to the risk orientation, the view of student substance depends on the culture of the student, the substance used, and the social context of use. When asked about the programs in their school district, this respondent says:

R: I really think it's essential that, in this particular area, especially with drug, alcohol, and so forth, we want to make sure that whatever we are going to say to your youngsters, with regards to that curriculum, that it doesn't violate any cultural norm that's out there, that we may be aware of. There may be a set of norms operating out there that a—I have to back up a little bit. I'm just going to generalize for a second. As a WASP teacher, working in a non-WASP environment, I may not be conscious of the fact that whatever I'm saying may be contrary to an ethnic or cultural norm out there. For instance, in some households it's perfectly acceptable for a young person to have a half a tumbler or a couple of ounces of wine with their dinner. It could be diluted and so forth, should we say that is bad, as a classroom teacher?

I: That is a very interesting question. How would you answer that?

R: I did work in that kind of an environment and who am I to argue with a first-generation Italian family or French family or any family, for that matter, that says wine to a hard daily diet is like milk to most Americans. So, I would say, we necessarily have to take that into account. We shouldn't say that is evil and don't do it. I think the institution has to be flexible enough to say to students, this is what happened in terms of prolonged use of alcohol, especially when it's abusing that particular substance. However, we do understand that if I was teaching in Marseilles or if I was teaching in Milan, that as a French teacher or as an Italian teacher, I wouldn't make a big deal out of it because I know and it's perfectly acceptable for young people, age 10 or 11, to have a couple of ounces of wine with their dinner. It's a cultural norm. (no. 298, 12-13).

Notably absent from this passage is discussion of at-risk students. Furthermore, the respondent goes to great lengths to describe a "cultural norm" in which he questions, "Who am I to argue with a first-generation Italian family or French family or any family, for that matter, that says wine to a hard daily diet is like milk to most Americans?" From this perspective, the DATE program should take into account the multicultural environment of the student and the conditions of substance use. This approach is not described in the DATE application.

Notably absent from these data are the three elements that constitute the risk orientation: First, respondents providing this alternative context for the delivery of DATE show an absence of verbal statements characteristic of the most commonly held view of risk. Second, there is an absence of both the association of a majority of students with risk and the equation of substance use with substance abuse. Third, there is an absence of the desire to identify those at risk.

## NOTES

1. They include (but are not limited to) items listed as risk factors earlier in this article.
2. During notification and all subsequent conversations, the exact phrase "at risk for becoming substance abusers" was used as sole inclusion criterion by researchers and their contact people. As will be shown from 1992 findings, it was found that school district personnel had clear perceptions of the defining characteristics of this phrase and, therefore, clear understanding of inclusion criteria for this group. Specific criteria for inclusion were *purposely* not provided because researchers wanted school district personnel to operationalize their own conception of the term *at risk*. This allows for comparisons of the extent to which the actual groups of at-risk and thriving students matched the risk factor model, the topic of another article.
3. As previously stated, one district refused participation, generating 11 districts.
4. The first number refers to the code number assigned to the interview; the second refers to the page number of the transcript.
5. Other infrequently mentioned services included but were not limited to Friday Night Live, peer counseling, and student assistance services. Without referring to it by name, some students described the service elements found in the curriculum "Here's Looking at You, 2000."

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